Summary of Striving Readers Projects:
Profile of Memphis City Schools' Striving Readers Project and Evaluation_____

Grantee: Memphis City Schools
Project Director: Dr. Elizabeth Heeren
Local Evaluator: RBS
Principal Investigator: Dr. Jill Feldman
Project Website: http://memphisstrivingreaders.org

Setting
Eight middle schools serving over 6,000 students in grades six through eight in Memphis, Tennessee are participating in the Striving Readers project. Four middle schools are implementing both the targeted and the whole school interventions; four are control schools. Ninety-five percent of the students served by these schools are African American and five percent are Hispanic. Eighty-eight percent of these students are eligible for free or reduced priced lunch, and 3 percent are identified as English Language Learners.

Intervention Models _____

Targeted Intervention
Classroom Model as Planned: READ 180 Enterprise Edition, developed by Scholastic Inc, aims to address the individual needs of struggling adolescent readers who are reading below grade level through adaptive and instructional software, teacher-directed instructional rotations, and the use of tailored textbooks and independent or modeled reading of literature intended to be of high interest to adolescents. The program focuses on elements of phonics, fluency, vocabulary, comprehension, spelling, writing and grammar, and aims to promote self-directed learning. Weekly and monthly assessments are provided by the READ 180 Topic Software and the Scholastic Achievement Manager (SAM) software provides feedback to teachers on student assessments. In addition, diagnostic testing using the Scholastic Reading Inventory (SRI) is conducted three times a year.

Professional Development Model as Planned: Teachers who are new to READ 180 are offered an initial one-day training, an additional one day of follow-up training on the model provided by the developer, and six networking meetings throughout the year provided by district staff, totaling 24 hours per teacher. In the second year of implementation, a six-hour online training module from Scholastic on "Best Practices for Reading Intervention" as well as observations three times a year with follow-up meetings with the model developer and district staff (4.5 additional hours per teacher) were added for teachers new to the intervention. In subsequent years, returning teachers are offered a one day training at the beginning of the school year with the model developer and four networking meetings with district staff, totaling 10 hours per teacher. They are to be observed three times a year with follow-up meetings by district staff.

U.S. Department of Education,
Office of Elementary and Secondary Education
Submitted by Abt Associates Inc.

Striving Readers: Memphis City Schools, TN
Project Profile: Years 1 – 2 of Implementation
1

Context for Implementation: The READ 180 program is being implemented as a supplement to the district's regular English language arts curriculum in the schools, replacing an elective course. Students in grades 6-8 are eligible for READ 180 if they score in the bottom quartile of the Tennessee Comprehensive Assessment Program (TCAP). All special education students who are struggling readers are eligible for the interventions. Eligible students can receive the intervention for up to two years. In year one of implementation, 698 students in grades 6-8 were served by the intervention. In the second year (2007-08), the students in grade 8 in year one (2006-07) graduated out of the program and a new cohort of 6th graders were added to READ 180, for a total of 608 students being served in Year 2 of implementation. The targeted intervention will be implemented for a total of four years.

Whole School Intervention

Classroom Model as Planned: The Memphis Content Literacy Academy (MCLA) professional development model is being implemented as the whole school intervention. The model, which was developed by team members from the University of Memphis and Memphis City Schools, trains core content area teachers to teach students research-based strategies to help them strengthen their fluency, vocabulary, and comprehension skills before, during, and after reading.

Professional Development Model as Planned: English language arts, mathematics, science, and social studies teachers in four of the middle schools are offered professional development in the MCLA model. New teachers of the Memphis Content Literacy Academy are offered a two year course with 30 weekly classes per year provided by model developers, totaling 90 hours per teacher per year. Literacy coaches are also available on-site to provide technical assistance on the whole school model on an as-needed basis. The teachers' professional development in their second year consists of the second half of the MCLA course, totaling 90 hours per teacher per year.

Context for Implementation: The whole school intervention is being implemented only in the 4 treatment middle schools in the first two years of the program but the four control schools are being added in year three. In years 1 and 2 of implementation, the whole school intervention serves approximately 2,400 students in grades 6-8 in each school year in the four treatment schools and year 3 of implementation will include approximately another 2,400 students. The whole school intervention will be implemented for a total of four years.

Evaluation Design_____

Targeted Intervention

Research Question:
1. What is the immediate impact of Read 180 on the reading and subject area achievement of struggling readers at the end of the first year of student participation?

Research Design and Methods: Students scoring in the lowest quartile on the English/Language Arts component of the TCAP are randomly assigned to receive the supplemental Read 180 class or to a control group. Students continue to receive instruction in

the regular language arts curriculum. The impact of Read 180 on student outcomes will be modeled using multilevel models to account for the nesting of students within schools.

Control Condition: Students randomized to the control group receive their regular elective courses in place of the treatment class.

Sample Size: The samples for the impact evaluation include a treatment group of 987 struggling readers in grades 6–8 who have received READ 180 for one year, and 1,446 struggling readers in the control group, across 8 schools.

Key Measures of Student Reading Outcomes (Source):
Iowa Test of Basic Skills (ITBS) (External Test Publisher)
Tennessee Comprehensive Assessment Program (TCAP) (State Test)

Whole School Intervention
Research Question:
1. What are the separate and combined effects of MCLA and Read 180 on reading achievement levels?

Research Design and Methods: The eight study schools were matched based on school enrollment levels and 2005 TCAP Mean NCE scores in English/Language Arts and Mathematics (disaggregated by grade) and then randomly assigned to implement the MCLA model or to a control condition. Students in the treatment schools are taught by teachers trained in the MCLA model. Within any given MCLA school, some of the students are randomized to the Read 180 group and therefore receive both treatments while the other students only receive the whole-school intervention. Conversely, in non-MCLA schools, some of the students only receive the Read 180 treatment while the other students receive neither treatment. A cluster randomized control trial analysis will be used to compare pre-program student achievement scores with post-program student achievement scores. Two-level hierarchical linear models (students nested within schools) will be fit to assess the impact of MCLA on student outcomes. A cross-level interaction term will be included to estimate the differential effect of MCLA on student outcomes with and without Read 180. A regression adjusted comparison of mean outcomes will also be used.
Future evaluation reports will include findings on the impact of the whole school intervention on student achievement.

Sample Size: Eight schools in the district were randomly assigned to implement the whole school intervention or to continue with business-as-usual for the first 2 years of the program. Starting in the 3rd year of implementation, all 8 middle schools will implement the whole school evaluation. In the first two years of the program (2006-07 and 2007-08), the whole school intervention is being delivered to all students in the 4 treatment middle schools, which involves a sample of approximately 2400 students in grades 6-8. The sample in the four control schools is comparable, with a total estimated enrollment of total of 2,500 students in grades 6–8.

Key Measures of Student Reading Outcomes (Source):
Iowa Test of Basic Skills (ITBS) (External Test Publisher)
Tennessee Comprehensive Assessment Program (TCAP) (State Test)

Year 2 Evaluation Findings _____

Targeted Intervention

Fidelity of Implementation of the Targeted Intervention Model: In terms of fidelity of implementation of the *professional development model,* in Year 1 (2006-07), the majority of teachers participated in the READ 180 professional development activities at either an adequate level (53%) or high level (16%). The level of participation in professional development increased in the second year of implementation, with 53% of teachers participating at an adequate level and 21% participating at a high level.

In terms of fidelity of implementation of the *classroom model* ratings of the fidelity of implementation of the program model were based on a combination of classroom observations, teacher surveys and ratings from the SAM data management system. In year 1 of the program, 42% of teachers implemented the model at an adequate level. In year 2, this proportion increased to 58% of teachers.

Impact of the Targeted Intervention on Student Reading Outcomes: There were no statistically significant impacts on the reading achievement of struggling readers in grades 6-8 after one year of exposure to READ 180, with effect sizes of .03 on ITBS, and .01 on TCAP. Subgroup analyses that examined effects separately for each cohort of 6th graders showed no significant impacts. There was also no significant impact for struggling readers in grades 7 and 8 who had had the opportunity for two years of exposure to READ 180.

Whole School Intervention

Fidelity of Implementation of the Whole School Intervention Model: In terms of fidelity of implementation of the *professional development model* in year 1 (2006-07), approximately half (51%) of all eligible content-area teachers enrolled in the fall MCLA course. Of those teachers that participated, 62% attended 80 percent or more of their classes. In year two of implementation, 64% of teachers completed the fall MCLA course and 57% completed the spring course. 80% of teachers attended at least 80 percent of the sessions offered in the fall and 77% of teachers attended at least 80 percent of the sessions offered in the spring.

Summary of the Strengths and Weaknesses of the Impact Evaluation of the Targeted Intervention:

Strengths
- Eligibility for random assignment was determined systematically, using a predetermined cutoff score on a test of reading achievement (Reading Language Arts subtest of the Tennessee Comprehensive Assessment Program (TCAP)).

- Random assignment was faithfully executed, with no evidence of students receiving the intervention after being randomized to the control condition.

- There is no evidence that there are other factors (e.g., other reading programs or district policies) that were implemented in ways that would undermine the evaluators' ability to attribute impacts to Read 180.

- The evaluation employs two reading tests as outcome measures. The first (ITBS) assesses vocabulary, word analysis, listening and comprehension, and was developed by an external test publisher. The second (TCAP) assesses reading and language arts, and was developed by the state. There is no reason to believe that students assigned to the treatment group have more experience taking the tests than do the control group students, or that the tests measures skills specific to the intervention, both of which could undermine confidence in the impact estimates.

- Few students were unable to participate in follow-up data collection, suggesting that the integrity of the original randomized design was preserved, and that treatment and control groups continue to be statistically equivalent on all measured and unmeasured characteristics at follow-up. Despite low attrition, small, statistically significant differences in pre-study reading achievement favoring the control group were noted on the students included in the analysis at follow-up. The effects of this difference are mitigated by the inclusion of the pre-test measure in the statistical models estimating the impact of the program.

- When estimating impacts, appropriate analytic steps were taken to account for the clustering of students within schools.

Weaknesses
- The year two evaluation report, which includes findings from the first two years of implementation, includes a sample of students large enough to detect an impact (in standard deviation units) of the intervention on reading achievement equivalent to .15 on the ITBS and .14 on the TCAP for grades 6-8.[1] Because Memphis plans to offer the intervention to new groups of students for four school years, future reports will have larger sample sizes and be able to detect smaller impacts of one year of the intervention.

---

[1] Abt Associates staff calculated the MDE by multiplying the standard error of the impact estimate by 2.8. This calculation produces the MDE for a two-tailed test with 80% power, and with an alpha level of .05, and accounts for clustering and for the inclusion of the covariates in the model.